Microphthalma disjuncta Wied.

A single male from Macdiarmid, Lake Nipigon, Ontario, agrees perfectly with Wiedemann's description of disjuncta. The abasal half of the second, third and fourth segments is silvery greyish white pollinose while the apical half is shining black. M. nigra Macq. has been placed as a synonym of disjuncta but this disposition of nigra may not be correct. Macquart's figure shows the arista with long pubescence (or plumose?). His assertion, "Abdomen d'un noir un peu bleuatre avec quelques reflets gris," does not apply so well to phyllobhagae as to michiganensis female (I have no female of disjuncta), provided the thorax has been wet and the pollen not evident. Macquart's specimen evidently had the thorax discolored. However, it is possible that the species described here as new is actually nigra Macq., but this does not seem likely. Two additional males from Mississippi agree with the Macdiarmid specimen.

New Mites of the Family Dermanyssidae (Acarina).

By H. E. EWING, Bureau of Entomology, U. S. Department of Agriculture.

In the following short paper five new species are described; one of *Serpenticola*, one of *Leiognathus*, two of *Liponyssus* and one of *Dermanyssus*. All types are catalogued and deposited in the United States National Museum.

Serpenticola easti, new species.

9. Medium-sized, when fully engorged, over twice as large as when unfed. Palpi moderate, extending slightly beyond the tips of first femora; palpal spur divided to its base. Anterior dorsal shield as broad as long, widest slightly behind its middle, subtruncate behind and not extending beyond coxae IV. Setae of anterior dorsal shield as follows: An anterior marginal pair situated at the anterior corners of shield; three pairs of lateral marginal setae, one of which is situated at the broadest part of the shield; four submedian pairs, the most anterior of these being much nearer the median line than the others; a single other pair situated between the last lateral marginal pair and the third submedian pair. Posterior dorsal shield minute, slightly emarginate in front but otherwise almost circular; situated

almost directly above the anal shield. Peritreme short, scarcely extending forward as far as the middle of coxae II, almost straight. Sternum fully twice as broad as long, concave behind; with two pairs of setae, one on front margin, submedian in position and one on lateral margin, slightly in front of posterior corners of plate. Genito-ventral plate very long and sharply pointed posteriorly. It extends for almost one-half the distance from the posterior coxae to the anal plate and is without setae. Anal plate broadly and evenly rounded in front and with moderate scobinate area posteriorly; anal opening with a rim of uniform thickness and situated less than one-half its greatest diameter from the anterior margin. Paired anal setae situated somewhat in front of the posterior margin of anus, in length equal to the greatest diameter of the anus; posterior anal seta situated at about one-half the distance from the anal opening to the posterior end of anal plate. Legs moderate; first pair the longest. Length, 1.17 mm; width, 0.75 mm. &, unknown.

Type-locality, (?). Type-slide, Cat. No. 895, U. S. N. M. Described from five females taken from a western lizard, Sceloporus graciosus, kept in captivity by C. S. East. This species is related to S. serpentium (Hirst), but differs from Hirst's species in the shape of the anterior dorsal shield, the number of setae on this shield and in a few other characters.

Leiognathus brevipes, new species.

2. A rather small, stout-legged species. Palpi stout, extending slightly beyond the tips of anterior femora. Dorsal shield large, almost as broad as the cephalothorax. Peritreme long, curved, extending beyond the second coxae. Sternal plate broader than long. Anal plate about two-thirds as broad as long, broadly rounded in front and with a conspicuous, scobinate area at the posterior end. Anal opening about one and one-half times as long as broad, with a rim of uniform thickness and situated about its greatest diameter from the anterior margin of anal plate. Paired anal setae rather small, situated slightly in front of the posterior margin of anal opening; posterior anal seta about the same size as paired anal setae and situated about onehalf the distance from the posterior margin of the anal opening to the tip of anal plate. Legs stout, first pair the longest. Femur I but slightly longer than broad; patella I about as long as broad; tibia I equal to patella I; tarsus I equal to tibia I plus patella I and with sides parallel. Tarsal claws of all legs stout and not surpassing pulvilli. Length, 0.56 mm.; width, 0.27 mm. &, unknown.

Type-locality, East Falls Church, Virginia. Type-slide, Cat. No. 896, U. S. N. M.

Described from several females taken by E. A. Chapin from a scarlet tanager, *Piranga crythromelas*, East Falls Church, Virginia, May 6, 1923. In this species the body is strongly constricted between the cephalothorax and abdomen. The species is more nearly related to *L. constrictus* Ewing, but differs from *L. constrictus* in having a broader dorsal shield, less prominent anal setae, stouter legs and in a few other characters.

Liponyssus robustipes, new species.

2. A stout species with enlarged second legs. Palpi short, hardly reaching the tips of the first femora. Dorsal shield large, covering most of the cephalothorax and extending posteriorly to beyond the anus. Peritreme long and sinuous, extending forward to the middle of the first coxae. Setae of body stout, straight, simple and peg-like. Sternal plate twice as broad as long; front margin almost straight, posterior margin deeply concave; four sternal setae present, first pair near the front margin, second pair near the posterior angles. Genito-ventral plate long, pointed behind, extending over half way from the last pair of coxae to the anal plate and bearing a single pair of setae situated between the posterior coxae. Anal plate broadly rounded in front and with a conspicuous scobinate area at the tip. Anus situated about two-thirds its greatest diameter from the front margin of anal plate, its rim thicker in front and behind than at the sides. Paired anal setae situated in front of the posterior margin of anal opening; posterior anal seta situated more than half the distance from the anus to the tip of anal plate. Legs rather large and long; second pair decidedly enlarged. Patella I almost as long as femur I; tibia I subequal to patella I; tarsus I slightly tapering and about as long as tibia I plus patella I. Femur II broader than long; patella II subequal to femur II; tibia II as long as patella II but not so stout; tarsus II tapering, not as long as tibia II plus patella II. Length, 0.63 mm.; width, 0.41 mm. 3, not known.

Type-locality, (?). Type-slide, Cat. No. 897, U. S. N. M. Described from several females, taken from a bat, Tadarida mexicana, March 5, 1924 (Bishopp, No. 11346). This species differs from other described American bat-infesting species of Liponyssus in having the second pair of legs much stouter than the others.

Liponyssus chilensis, new species.

2. Palpi short, slightly longer than femur I. Dorsal plate large, broad, pointed behind. Body setae small, almost minute. Peritreme long, curved, but not sinuous. Sternum broader than long, with projecting posterior lateral processes and provided with three pairs of setae; the first pair on the front margin, the second pair at the base of the posterior projections and the third pair at the tips of these projections. Anal plate broadly rounded in front and with a conspicuous scobinate area at tip. Anus with rim of uniform thickness, situated two-thirds its greatest diameter from the front margin of anal plate. Paired anal setae small, situated at the level of posterior margin of anus. Posterior anal seta subequal to paired anal setae and situated at the front margin of scobinate area. Coxae without spines except for the second pair. In front, coxa II has a large, bladelike spine. Patella I and tibia I subequal; tarus I not equal to tibia I plus patella I. Length, about 0.80 mm.; width, 0.45 mm. 3, unknown.

Type-locality, Chile. Type-slide, Cat. No. 898, U. S. N. M. Described from a single female taken from a bat, Tadarida brasiliensis, by C. E. Porter in Chile (probably at Valparaiso). The presence of but a single pair of coxal spines which are located on the second coxae, distinguishes this species from the other American bat-infesting forms.

Dermanyssus oti, new species.

9. A small stout species. Palpi stout, yet extending to the bases of the tibiae of the short anterior legs. Dorsal plate shield-shaped, broadest slightly in front of its middle; not sharppointed behind but narrowly rounded. Peritreme very short, not much longer than coxa III, once curved. Sternal plate a strongly arched band of chitin bearing three pairs of subequal, long setae. Genito-ventral plate a tongue of chitin reaching to the middle of the abdomen. Anal plate broadly egg-shaped in outline. Anus with rim much thickened behind, situated about two-thirds its greatest diameter from the tip of anal plate. Paired anal setae situated slightly in front of a line drawn through the middle of anus. Posterior anal seta subequal to paired anal seta and situated almost contiguous with the posterior margin of anus. Legs short and stout, all shorter than the body. Femur I broader than long; patella I subequal with femur I; tibia I not so broad but longer than patella I; tarsus I scarcely equal to the combined length of tibia and patella. Length, 0.63 mm.; width, 0.39 mm. 8, not known.

Type-locality, Bloomington, Indiana. Type-slide, Cat. No. 899, U. S. N. M.

Described from two females taken from a screech owl, *Otus asio asio*, by R. M. Howe, at Bloomington, Indiana. The mites were stated to be most numerous on the head and face of the host. This species is very distinct because of its short stout legs.

Work on the United States National Museum Collection of Muscoid Diptera from 1914 to 1919.

By Charles H. T. Townsend, Itaquaquecetuba, Sao Paulo, Brazil.

In order to prevent misconceptions arising from what has already been published, or may be published in the future, it becomes desirable to make a detailed statement regarding the work I did on the muscoid collection from August, 1914, to March, 1919, while acting as honorary custodian of the same. Sundry and various acts and omissions, of which I am not guilty, but which, were they true, would reflect seriously on my standing as a muscoid student, have been attributed to me in recent scattered articles and papers. By referring to the following statements, anyone may judge for himself as to the truth or falsity of all such imputations.

The system I adopted was to make a careful study of all the genotypes possible to secure and arrange them in convenient tribes. This would immensely augment the working value of the collection, and also verify synonymy. The first and most important step was to have as many authentically determined genotypes as possible for comparison in the routine work of determinations.

First of all, I verified separately in the literature every genotype designation for all the muscoid genera of the world, and published the necessary supplementary notes to bring the records to date.

I donated a large number of holotypes and allotypes of my own genotypes recently erected, and the collection already contained a great many genotypes of mine described in former years.